

*A³
(concluded)*

however, none of the growth rates are sufficient for the two precursors under the instant conditions.

A⁴

Please replace paragraph 4, page 31, with the following paragraph:

The growth of SiO₂ with only the TDEAHf, as measured by the subtraction of ellipsometric thickness from XRF thickness (shown in Figure 10) was greater than that from the TDEASi precursor alone. Films grown from the precursor mixture (TDEAHf+TDEASi) showed still higher SiO₂ growth rates as shown in Figure 11. This increased growth rate is unexpected and should be quite useful for the growth of hafnium silicate films of uniform Hf:Si composition through the thickness of the film.

Please cancel herein claims 6, 7, 13-15, 17-36 and 38-85 without prejudice.

Please amend the claims to read as follows:

SUB C¹ 7

1. (AMENDED) A CVD precursor composition for forming a thin film dielectric on a substrate, such precursor composition including at least one metalloamide source reagent compound of the formula:



A⁵

wherein M is selected from the group consisting of: Zr, Hf, Y, La, Lanthanide series elements, Ta, Ti, Al; N is nitrogen each of R¹ and R² is same or different and is independently selected from the group consisting of H, aryl, perfluoroaryl, C₁-C₈ alkyl, C₁-C₈ perfluoroalkyl, and alkylsilyl; and x is from 2 to 5 with the proviso that at least two of x are different.

2. (AMENDED) The CVD precursor composition according to claim 1, wherein at least one of x is NMe₂.

3. (AMENDED) The CVD precursor composition according to claim 1, wherein at least one of x is NEt₂.

4. The CVD precursor composition according to claim 1, wherein M is Zr.

5. The CVD precursor composition according to claim 1, wherein M is Hf.

SUB C17

8. The CVD precursor composition according to claim 1, wherein the precursor composition further comprises a solvent medium selected from the group consisting of: ethers, glymes, tetraglymes, amines, polyamines, alcohols, glycols, aliphatic hydrocarbon solvents, aromatic hydrocarbon solvents, cyclic ethers and combinations of two or more of the foregoing.

9. (AMENDED) The CVD precursor composition according to claim 4, wherein the precursor composition further comprises a solvent medium selected from the group consisting of: ethers, glymes, tetraglymes, amines, polyamines, alcohols, glycols, aliphatic hydrocarbon solvents, aromatic hydrocarbon solvents, cyclic ethers and combinations of two or more of the foregoing.

10. (AMENDED) The CVD precursor composition according to claim 8, wherein the solvent is octane.

11. The CVD precursor composition according to claim 1, wherein the metalloamide source reagent compound is injected by liquid delivery into a chemical vapor deposition chamber.

12. The CVD precursor composition according to claim 1, wherein the metalloamide source reagent compounds is delivered by bubbler into a chemical vapor deposition chamber.

16. The CVD precursor composition according to claim 1, wherein the precursor composition comprises multiple metalloamide source reagent compounds.

37. (AMENDED) A CVD precursor composition for forming a thin film dielectric on a substrate, such precursor composition including a vapor source reagent mixture including a metalloamide source reagent compound of the formula:



wherein M is selected from the group consisting of: Zr, Hf, Y, La, Lanthanide series elements, Ta, Ti, Al; N is nitrogen; each of R^1 and R^2 is same or different and is independently selected from the group consisting of H, aryl, perfluoroaryl, C_1-C_8 alkyl, C_1-C_8 perfluoroalkyl, and alkylsilyl; and x is from 2 to 5, with the proviso that at least two of x are different.